

ABSTRACT

A method and system for securing network communications are provided. In a network a Secure Reverse Proxy ("SRP") is placed among a server and a client where the client and SRP establish a secure connection using TLS protocol. Upon receiving a request from the client for a secure HTTP page, the SRP determines if the secure page is maintained in its cache. If the page is present, the SRP responds to the client by sending the requested secure HTTP page without contacting the server. If the page is not contained within the SRP's cache, the SRP establishes secure TLS connection with the server and forwards the request for the HTTP page. Receiving the HTTP page from the server, the SRP places it in its cache for future use. Having the page in its cache the SRP retrieves the page, encrypts it, and sends it to the requesting client. Subsequent requests for the same page do not involve the server enhancing the efficiency of network operations.